



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/827,031	04/19/2004	Tomoaki Kimura	JP920030052US1	2750

46335 7590 10/03/2005

DILLION & YUDELL, LLP
8911 N CAPITAL OF TEXAS HWY
SUITE 2110
AUSTIN, TX 78759

EXAMINER

KAPADIA, VARSHA A

ART UNIT

PAPER NUMBER

2651

DATE MAILED: 10/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/827,031	Applicant(s) KIMURA, TOMOAKI	
	Examiner Varsha A. Kapadia	Art Unit 2651	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 8/30/04.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 18-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 18-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 August 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2651

Priority Papers

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Rejection Under 35 U.S.C. 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

In claims 1,8 and 15 is additional block part of the plurality blocks? If so the sequential writing unit is not defined to write the validity information in the additional block (a block previous to the single block). Furthermore the paragraph describing means/step of changing a location on the medium is very confusing as written.

In claims 2,9 and 16 the phrase “redundantly duplicated” is awkward.

In claims 6, 13 and 19, the phrase “writing a data recency indicator higher than the data recency indicator of said block fragment” is unclear as to higher in terms of what kind of measure?

In claims 4, 11,18 the phrase “said additional block continuously to said data fragment” is unclear as to data from the additional block is written towards the block fragment or is it

Art Unit: 2651

continuing after the block fragment. Last sentence in claim 11 is unclear as to meaning as written.

In claims 13 and 19, "said block fragment" lacks antecedent basis.

Claim 19 further limits the computer program product although it depends on the method claim.

To avoid guesswork on the part of the examiner no prior art rejection will be applied to claims 4-6, 11, 13, 18 and 19 until the claimed limitations are clearly defined.

Claim numbers are not in the sequential order. Claim number 17 is skipped.

Rejection Under 35 U.S.C. 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 7-10, 12, 14-16 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gill et al (6,469,854) in view of Chliwnyj et al (5,394,280).

With regards to claim 1, Gill et al discloses a storage apparatus for sequentially writing a plurality of data blocks on the medium (see figs. 2-4 and disclosure thereof) comprising:

a sequential writing unit for sequentially writing a plurality of blocks including a single block (see fig. 2 and 4 disclosure thereof), single block comprising data and validity information indicating whether or not the data contained in the block is valid (See figs. 3 and 4, disclosure thereof and col. 3 lines 58 to col. 4 line 33);

an error detecting unit detecting when the writing of the single block by sequential writing unit causes the validity information to be written in an error area and generating a write-error signal in response to the detecting (see fig.4 elements 166,168, fig.3 element 136 disclosure thereof and col.5 lines 36-60 and the paragraph bridging cols. 4 and 5),

Although, Gill et al discloses the capability of changing location of the block (single block) written in the error area to the second area on the medium, Gill et al fails to specify that the write-area changing unit changes the location of an additional block (considered as block previous to the single block).

However, Chliwnyj et al discloses teachings to changing the location of additional block as claimed (see figs. 9-10 disclosure thereof and col.7 lines 29-68) .

It would have been obvious to one of ordinary skill in the art at the time this invention was made to modify the storage apparatus disclosed by Gill et al with the above teachings from Chliwnyj et al to provide a capability of changing the location of the additional data previous to the single block in order to preserve the expected gap between the data blocks and the error are and hence prevent the loss of the data as taught by Chliwnyj et al.

With regards to claims 2 and 7, Chliwnyj et al further discloses that the write area changing unit includes means for changing the write area of the additional blocks by rewriting the additional block as a reformatted block as claimed (see col.7 lines 46-68 and col.8 lines 35-43). Chliwnyj et al is relied upon for the same reasons as discussed above in this office action.

With regards to claim 3, Gill et al discloses that the error detecting unit further comprises means for detecting whether validity information of the single block is written in a storage area having a predetermined displacement from the single block (see fig. 2 elements 72,74 and 78 and

Art Unit: 2651

disclosure thereof); and means for detecting that the validity information of the single block is written in the error block in response to the write error (see col.4 lines 13-15).

Chliwnyj et al, further discloses in a write area changing unit, means for changing the write area of the additional block to selectively prevent a first part of the additional block from being written within the storage area and to selectively cause second part of the additional block to be in the error area (see figs. 9-10 and disclosure thereof). Chliwnyj et al is relied upon for the same reasons as described above in this office action.

With regards to claims 8-10, 14-16 and 20, the method/computer program instructions limitations recited in claims 8-10, 14-16 and 20 are similar to those recited in the apparatus claims 1-3 and 7, respectively. Therefore, the rejection applied to the apparatus claims 1-3 and 7 is also applied to claims 8-10, 14-16 and 20 for the same reasons of obviousness.

With regards to claim 12, Gill further discloses a capability to indicate the data recency (considered as the write history), see col.4 lines 4-33.

Prior Art Cited

Reference to Nazarian et al (6,445,524) cited as of interest.

Reference to Abe (6,229,661) cited as of interest.

Reference to Zaczek (6,381,706) cited as of interest.

Reference to Schibilla (6,384,999) cited as of interest.

Reference to Weng (6,769,088) cited as of interest.

Art Unit: 2651


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Varsha A. Kapadia whose telephone number is (571)272-7557. The examiner can normally be reached on Mon Tue and Thurs. from 6:30 AM to 2:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on 571 272 7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



VK



DAVID HUDSPETH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600